

AMENDMENT NO. 1
to the
INTERCONNECTION AGREEMENT
between
VERIZON NEW ENGLAND INC.
d/b/a
VERIZON MAINE

and
LIGHTSHIP TELECOM, LLC

This Amendment No. 1 is made this 8th day of August 2000, by and between Verizon New England Inc., d/b/a Verizon Maine ("Verizon"), a New York corporation with offices at 185 Franklin Street, Boston, Massachusetts 02110, and Lightship Telecom, LLC ("Lightship") a Delaware LLC with offices at 70 West Oakland Avenue, Suite 306, Doylestown, Pennsylvania 18901 ("Lightship"). (Verizon and Lightship may be referred to individually as a "Party" and collectively as the "Parties").

WITNESSETH:

WHEREAS, Verizon and Lightship are Parties to an Interconnection Agreement under Sections 251 and 252 of the Communications Act, dated June 14, 2000 (the "Interconnection Agreement"); and

WHEREAS, the Parties desire to amend that agreement as set forth herein;

NOW, THEREFORE, in consideration of the promises and mutual agreements set forth herein, the Parties agree to amend the Interconnection Agreement as follows:

1. Amendment to Interconnection Agreement. Effective as of the date first set forth above, the Interconnection Agreement is amended hereby as follows:

A) By inserting a new Attachment 1 Section 1.46a as follows:

"1.46a 'Line Sharing' is an arrangement by which Verizon facilitates Lightship's

provision of ADSL (in accordance with T1.413), Splitterless ADSL (in accordance with T1.419), RADSL (in accordance with TR # 59), MVL (a proprietary technology), or any other xDSL technology that is presumed to be acceptable for shared line deployment in accordance with FCC rules, to a particular Customer location over an existing copper Loop that is being used simultaneously by Verizon to provide analog circuit-switched voice grade service to that Customer by making available to Lightship, solely for Lightship's own use, the frequency range above the voice band on the same copper Loop required by Lightship to provide such services. This Agreement addresses line sharing over loops that are entirely copper loops. The Parties do not intend anything in this Agreement to prejudice either Lightship's position that line sharing may occur on loops constructed of fiber optic cable, digital loop carrier electronics, and copper distribution cable or Verizon's position that line sharing can only occur over copper loops or copper sub-loops."

B) By inserting a new Attachment 1 Section 11.2.10 as follows:

"11.2.10 To the extent required by Applicable Law, Verizon shall provide Line Sharing to Lightship for Lightship's provision of ADSL (in accordance with T1.413), Splitterless ADSL (in accordance with T1.419), RADSL (in accordance with TR # 59), MVL (a proprietary technology), or any other xDSL technology that is presumed to be acceptable for shared line deployment in accordance with FCC rules, on the terms and conditions set forth herein. In order for a Loop to be eligible for Line Sharing, the following conditions must be satisfied for the duration of the Line Sharing arrangement: (i) the Loop must consist of a copper loop compatible with an xDSL service that is presumed to be acceptable for shared-line deployment in accordance with FCC rules; (ii) Verizon must be providing simultaneous circuit-switched analog voice grade service to the Customer served by the Loop in question; (iii) the Verizon Customer's dial tone must originate from a Verizon End Office Switch in the Wire Center where the Line Sharing arrangement is being requested; and (iv) the xDSL technology to be deployed by the CLEC on that Loop must not significantly degrade the performance of other services provided on that Loop.

11.2.10.1 Verizon shall make Line Sharing available to Lightship at the rates set forth in Exhibit A. These rates and/or rate structures shall be considered interim in nature until they have been approved by the Commission or otherwise allowed to go into effect as a result of a proceeding before the Commission, whether initiated by Lightship or Verizon, in which Lightship is offered an opportunity to serve discovery and cross examine witnesses on the methodology and assumptions supporting Verizon's proposed rates and rate structures, including a tariff investigation, cost proceeding, arbitration or other evidentiary proceeding. If, as a result of any such proceeding, the Commission should approve (or otherwise allow to go into effect) permanent rates and/or rate structures different than those shown in Exhibit A, all such approved or effective permanent rates and/or rate structures shall supercede those shown in Exhibit A. The permanent rates shall be effective retroactively to June 14, 2000. The Parties shall true-up any amounts previously invoiced as if the permanent rates had been in effect as of that date. Each Party shall invoice the other for any amounts due to it as a result of such true-up, and all such invoices shall be paid in accordance with the Billing and Payment provisions of this Agreement.

In addition to the recurring and nonrecurring charges shown in Exhibit A for Line Sharing itself, the following rates shown in Exhibit A and in Verizon's applicable Tariffs are among those that may apply to a Line Sharing arrangement: (i) prequalification charges to determine whether a Loop is xDSL compatible (i.e., compatible with an xDSL service that is presumed to be acceptable for shared-line deployment in accordance with FCC rules); (ii) engineering query charges, engineering work order charges, or Loop conditioning (Digital Designed Loop) charges; (iii) charges associated with Collocation activities requested by Lightship and not covered by Exhibit A; and (iv) misdirected dispatch charges, charges for installation or repair, manual intervention surcharges, and trouble isolation charges.

11.2.10.2 The following ordering procedures shall apply to Line Sharing:

(i) To determine whether a Loop qualifies for Line Sharing, the Loop must first be prequalified to determine if it is xDSL compatible. Lightship must utilize the mechanized and manual Loop qualification processes described in the terms applicable to Digital Designed Loops, as referenced in paragraph (v) below, to make this determination.

(ii) Lightship shall place orders for Line Sharing by delivering to Verizon a valid electronic transmittal service order or other mutually agreed upon type of service order. Such service order shall be provided in accordance with industry format and specifications or such format and specifications as may be agreed to by the Parties.

(iii) If the Loop is prequalified by Lightship through the Loop prequalification database, and if a positive response is received and followed by receipt of Lightship's valid, accurate and pre-qualified service order for Line Sharing, Verizon will return a FOC within twenty-four (24) hours (weekends and holidays excluded).

(iv) If the Loop requires qualification manually or through an Engineering Query, three (3) additional business days will be generally be required to obtain Loop qualification results before a FOC can be returned following receipt of Lightship's valid, accurate request. Verizon may require additional time to complete the Engineering Query where there are poor record conditions, spikes in demand, or other unforeseen events.

(v) If conditioning is required to make a Loop capable of supporting Line Sharing and Lightship orders such conditioning, then Verizon shall provide such conditioning in accordance with the terms of this Agreement pertaining to Digital Designed Loops; or if this Agreement does not contain provisions pertaining to Digital Designed Loops, then in accordance with Verizon's generally available rates, terms and conditions applicable to Digital Design Loops; provided, however, that Verizon shall not be obligated to provide Loop conditioning if Verizon establishes that such conditioning is likely to degrade significantly the voice-grade service being provided to Verizon's Customers over such Loops.

(vi) The standard Loop provisioning and installation process will be initiated for the Line Sharing arrangement only once the requested engineering and conditioning tasks have been completed on the Loop. Scheduling changes and charges associated with order

cancellations after conditioning work has been initiated are addressed in the terms pertaining to Digital Designed Loops, as referenced in paragraph (v) above. The provisioning interval for the Line Sharing arrangement initially shall be the standard interval of six (6) business days applicable to 2W ADSL Loops. No later than December 1, 2000, and quarterly thereafter, the Parties shall meet to discuss whether OSS improvements, greater operational experience, or other factors have been realized that should make it practicable for Verizon to reduce the standard Line Sharing interval. In no event shall the Line Sharing interval applied to Lightship be longer than the interval applied to any affiliate of Verizon.

(vii) Lightship must provide all required Collocation, CFA, SBN and NC/NCI information when a Line Sharing Arrangement is ordered. Collocation augments required, either at the POT Bay, Collocation node, or for splitter placement must be ordered using standard collocation applications and procedures, unless otherwise agreed to by the parties or specified in this agreement.

(viii) The Parties recognize that Line Sharing is a new offering by Verizon. The Parties will make reasonable efforts to coordinate their respective roles in the early phases of the roll out of Line Sharing in order to minimize provisioning problems and facility issues. Lightship will provide reasonable, timely, and accurate forecasts of its Line Sharing requirements, including splitter placement elections and ordering preferences. These forecasts are in addition to projections provided for other stand-alone unbundled Loop types.

11.2.10.3 To the extent required by Applicable Law, Lightship shall provide Verizon with information regarding the type of xDSL technology that it deploys on each shared Loop. Where any proposed change in technology is planned on a shared Loop, Lightship must provide this information to Verizon in order for Verizon to update Loop records and anticipate effects that the change may have on the voice grade service and other Loops in the same or adjacent binder groups. As described more fully in Verizon Technical Reference 72575, the xDSL technology used by Lightship for Line Share Arrangements shall operate within the Power Spectral Density (PSD) limits set forth in T1.413-1998 (ADSL), T1.419-2000 (Splitterless ADSL), or TR59-1999 (RADSL), and MVL (a proprietary technology) shall operate within the 0 to 4 kHz PSD limits of T1.413-1998 and within the transmit PSD limits of T1.601-1998 for frequencies above 4 kHz, provided that the MVL PSD associated with audible frequencies above 4 kHz shall be sufficiently attenuated to preclude significantly degrading voice services. Lightship's deployment of additional Advanced Services shall be subject to the applicable rules and regulations of the FCC.

11.2.10.4 Lightship may only access the high frequency portion of a Loop in a Line Sharing arrangement through an established Collocation arrangement at the Verizon Serving Wire Center that contains the End Office Switch through which voice grade service is provided to Verizon's Customer. Lightship is responsible for providing a splitter at that Wire Center that complies with ANSI specification T1.413 through one of the splitter options described below. Lightship is also responsible for providing its own DSLAM equipment in the Collocation arrangement and any necessary CPE for the xDSL service it intends to provide (including CPE splitters, filters and/or other equipment necessary for the end user to receive

separate voice and data services across the shared Loop). Two splitter configurations are available. In both configurations, the splitter must be provided by Lightship and must satisfy the same NEBS requirements that Verizon imposes on its own splitter equipment or the splitter equipment of any Verizon affiliate. Lightship must designate which splitter option it is choosing on the Collocation application or augment. Regardless of the option selected, the splitter arrangements must be installed before Lightship submits an order for Line Sharing.

Splitter Option 1: Splitter in CLEC Collocation Area

In this configuration (option “A” in the New York collaborative), the Lightship-provided splitter (ANSI T1.413 or MVL compliant) is provided, installed and maintained by Lightship in its own Collocation space within the Customer’s serving End Office. The Verizon-provided dial tone is routed through the splitter in the CLEC Collocation area. Any rearrangements will be the responsibility of Lightship.

Splitter Option 2: Splitter in Verizon Area

In this configuration (option “C” in the New York collaborative), Verizon inventories and maintains a Lightship-provided splitter (ANSI T1.413 or MVL compliant) in Verizon space within the Customer’s serving End Office. At Lightship’s option, installation of the splitter may be performed by Verizon or by a Verizon-approved vendor designated by Lightship. The splitter is installed (mounted) in a relay rack between the POT Bay and the MDF, and the demarcation point is at the splitter end of the cable connecting the CLEC Collocation and the splitter. Verizon will control the splitter and will direct any required activity. Verizon will perform all POT (Point of Termination) Bay work required in this configuration. Verizon will provide a splitter inventory to Lightship upon completion of the required augment.

(i) Where a new splitter is to be installed as part of an initial Collocation implementation, the splitter installation may be ordered as part of the initial Collocation application. Associated Collocation charges (application and engineering fees) apply. Lightship must submit a new Collocation application, with the application fee, to Verizon detailing its request. Standard Collocation intervals will apply.

(ii) Where a new splitter is to be installed as part of an existing Collocation arrangement, or where the existing Collocation arrangement is to be augmented (e.g., with additional terminations at the POT Bay), the splitter installation or augment may be ordered via an application for Collocation augment. Associated Collocation charges (application and engineering fees) apply. Lightship must submit the application for Collocation augment, with the application fee, to Verizon. An interval of seventy-six (76) business days shall apply.

11.2.10.5 Lightship will have the following options for testing shared Loops:

11.2.10.5.1 Under Splitter Option 1, Lightship may conduct its own physical tests of the shared Loop from Lightship's collocation area. If it chooses to do so, Lightship may supply and install a test head to facilitate such physical tests, provided that: (i) the test head satisfies the same NEBS requirements that Verizon imposes on its own test head equipment or the test head equipment of any Verizon affiliate; and (ii) the test head does not interrupt the voice circuit to any greater degree than a conventional MLT test. Specifically, the Lightship-provided test equipment may not interrupt an in-progress voice connection and must automatically restore any circuits tested in intervals comparable to MLT. This optional Lightship-provided test head would be installed between the "line" port of the splitter and the POT bay in order to conduct remote physical tests of the shared loop.

11.2.10.5.2 Under Splitter Option 2, either Verizon or a Verizon-approved vendor selected by Lightship may install a Lightship-provided test head to enable Lightship to conduct remote physical tests of the shared Loop. This optional Lightship-provided test head may be installed at a point between the "line" port of the splitter and the Verizon-provided test head that is used by Verizon to conduct its own Loop testing. The Lightship-provided test head must satisfy the same NEBS requirements that Verizon imposes on its own test head equipment or the test head equipment of any Verizon affiliate, and may not interrupt the voice circuit to any greater degree than a conventional MLT test. Specifically, the Lightship-provided test equipment may not interrupt an in-progress voice connection and must automatically restore any circuits tested in intervals comparable to MLT. Verizon will inventory, control and maintain the Lightship-provided test head, and will direct all required activity.

11.2.10.5.3 Under either Splitter Option, if Verizon has installed its own test head, Verizon will conduct tests of the shared Loop using a Verizon-provided test head, and, upon request, will provide these test results to Lightship during normal trouble isolation procedures in accordance with reasonable procedures.

11.2.10.5.4 Under either Splitter Option, Verizon will make MLT access available to Lightship via RETAS after the service order has been completed. Lightship will utilize the circuit number to initiate a test. This functionality will be available on July 31, 2000.

11.2.10.5.5 The Parties will continue to work cooperatively on testing procedures. To this end, in situations where Lightship has attempted to use one or more of the foregoing testing options but is still unable to resolve the error or trouble on the shared Loop, Verizon and Lightship will each dispatch a technician to an agreed-upon point at the Main Distribution Frame (or in exceptional cases to an agreed upon site in the field) to conduct a joint meet test to identify and resolve the error or trouble. Verizon may assess a charge for a misdirected dispatch only if the error or trouble is determined to be one that Lightship should reasonably have been able to isolate and diagnose through one of the testing options available to Lightship above. The Parties will mutually agree upon the specific procedures for conducting joint meet tests.

11.2.10.6 Verizon and Lightship each have a joint responsibility to educate its Customer regarding which service provider should be called for problems with their respective voice or advanced service offerings. Verizon will retain primary responsibility for voice band trouble tickets, including repairing analog voice grade services and the physical line between the NID at the Customer premise and the point of demarcation in the central office. Lightship will be responsible for repairing advanced data services it offers over the Line Sharing arrangement. Each Party will be responsible for maintaining its own equipment. Before either Party initiates any activity on a new shared Loop that may cause a disruption of the voice or data service of the other Party's Customer, that Party shall first make a good faith effort to notify the other Party of the possibility of a service disruption. Verizon and Lightship will work together to address Customer initiated repair requests and to prevent adverse impacts to the Customer.

11.2.10.6.1 When Verizon provides inside wire maintenance services to the Customer, Verizon will only be responsible for testing and repairing the inside wire for voice-grade services. Verizon will not test, dispatch a technician, repair, or upgrade inside wire to clear trouble calls associated with Lightship's advanced services. Verizon will not repair any CPE equipment provided by Lightship. Before a trouble ticket is issued to Verizon, Lightship shall validate whether the Verizon Customer is experiencing a trouble that arises from Lightship's advanced service. If the problem reported is isolated to the analog voice-grade service provided by Verizon, a trouble ticket may be issued to Verizon.

11.2.10.6.2 In the case of a trouble reported by the Customer on its voice-grade service, if Verizon determines the reported trouble arises from Lightship's advanced services equipment, splitter problems, or Lightship's activities, Verizon will:

- a) Notify Lightship and request that Lightship immediately test the trouble on Lightship's advanced service.
- b) If the Customer's voice grade service is so degraded that the Customer cannot originate or receive voice grade calls, and Lightship has not cleared its trouble within a reasonable time frame, Verizon may take unilateral steps to temporarily restore the Customer's voice grade service if Verizon determines in good faith that the cause of the voice interruption is Lightship's data service.
- c) Upon completion of steps (a) and (b) above, Verizon may temporarily remove the Lightship-provided splitter from the Customer's Loop and switch port if Verizon determines in good faith that the cause of the voice interruption is Lightship's data service.
- d) Upon notification from Lightship that the malfunction in Lightship's advanced service has been cleared, Verizon will restore Lightship's advanced service by restoring the splitter on the Customer's Loop.

- e) Upon completion of the above steps, Lightship will be charged a Trouble Isolation Charge (TIC) to recover Verizon's costs of isolating and temporarily removing the malfunctioning advanced service from the Customer's line if the cause of the voice interruption was Lightship's data service.
- f) Verizon shall not be liable for damages of any kind for temporary disruptions to Lightship's data service that are the result of the above steps taken in good faith to restore the end user's voice-grade POTS service, and the indemnification provisions set forth in **Section 25. 2** shall control in such instances."

C) By adding the following language immediately after 25.3 of the Interconnection Agreement:

"25.3 Notwithstanding any other provision of this Agreement, with respect to Verizon's provision of Line Sharing to Lightship hereunder, each Party shall release, indemnify, defend and hold harmless the other Party for any Loss suffered, made, instituted, or asserted by the other Party's Customer(s) that arise from disruptions to that Customer's service or from any violation of Applicable Law governing the privacy of the Customer's communications, and that are proximately caused by the grossly negligent or willful acts or omissions of the indemnifying Party in connection with a Line Sharing arrangement."

D) By revising Exhibit A of the Interconnection Agreement to reflect the additional rates contained in Exhibit A of this Amendment.

2. Conflict between this Amendment and the Interconnection Agreement. This Amendment shall be deemed to revise the terms and provisions of the Interconnection Agreement to the extent necessary to give effect to the terms and provisions of this Amendment. In the event of a conflict between the terms and provisions of this Amendment and the terms and provisions of the Interconnection Agreement, this Amendment shall govern, *provided, however*, that the fact that a term or provision appears in this Amendment but not in the Interconnection Agreement, or in the Interconnection Agreement but not in this Amendment, shall not be interpreted as, or deemed grounds for finding, a conflict for purposes of this Section 2.

3. Counterparts. This Amendment may be executed in one or more counterparts, each of which when so executed and delivered shall be an original and all of which together shall constitute one and the same instrument.

4. Captions. The Parties acknowledge that the captions in this Amendment have been inserted solely for convenience of reference and in no way define or limit the scope or substance of any term or provision of this Amendment.

5. Scope of Amendment. This Amendment shall amend, modify and revise the Interconnection Agreement only to the extent set forth expressly in Section 1 of this Amendment, and, except to the extent set forth in Section 1 of this Amendment, the terms and provisions of

the Interconnection Agreement shall remain in full force and effect after the date first set forth above.

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment to be duly executed and delivered by their duly authorized representatives as of the date first set forth above.

LIGHTSHIP TELECOM, LLC

VERIZON MAINE

By:_____

By:_____

Printed:_____

Printed: Jeffrey A. Masoner_____

Title:_____

Title: Vice-President - Interconnection Services
Policy & Planning

[Exhibit 1](#)